

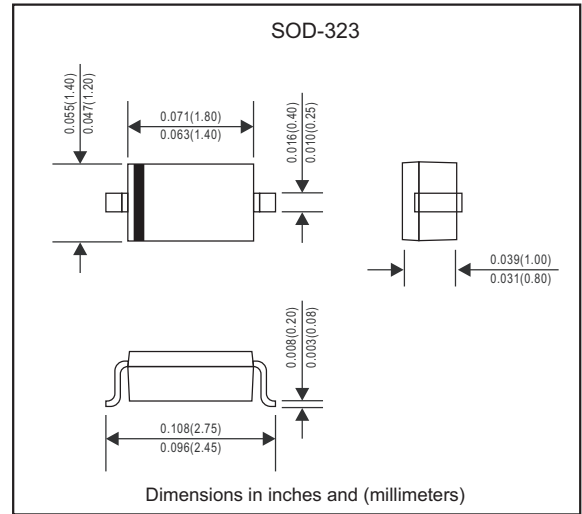
Features

- ◆ For use in low voltage, high frequency inverters
- ◆ Free wheeling, and polarity protection applications

Mechanical data

- ◆ **Case:** JEDEC SOD-323 molded plastic body
- ◆ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ◆ **Polarity:** Color band denotes cathode end
- ◆ **Mounting Position:** Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbols	CUS520,H3F-FS	Units
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
RMS reverse voltage	V_{RMS}	21	V
Working Peak Reverse Voltage	V_{DC}	30	V
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	1.5	A
Maximum Instantaneous Forward Voltage $I_F=20\text{mA}$ $I_F=200\text{mA}$	V_F	0.37 0.60	V
Power Dissipation	P_D	200	mW
Reverse current $V_R=30\text{V}$	I_R	5	μA
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	300	$^{\circ}\text{C/W}$
Reverse voltage $I_R=100\mu\text{A}$	$V_{(BR)R}$	30	V
Reverse recovery time $I_F=I_R=200\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$	t_{rr}	10	ns
Forward Continuons Current	I_{FM}	350	mA
Total capacitance $V_R=0\text{V}, f=1\text{MHz}$	C_{tot}	50	pF
Junction temperature	T_j	125	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

Rating and characteristic curves

Fig. 1 POWER DERATING CURVE

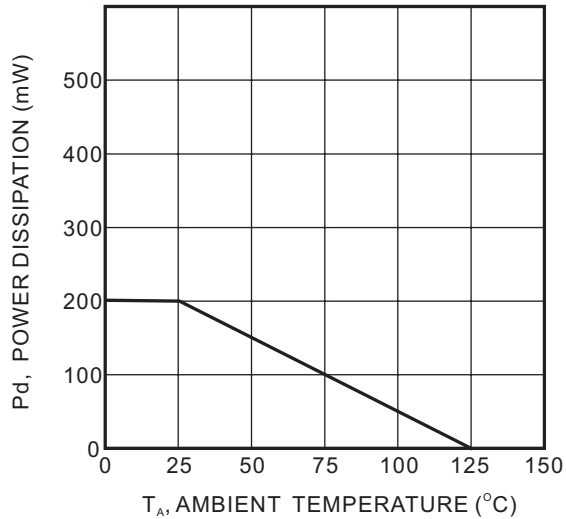


Fig. 2 TYPICAL FORWARD CHARACTERISTIC

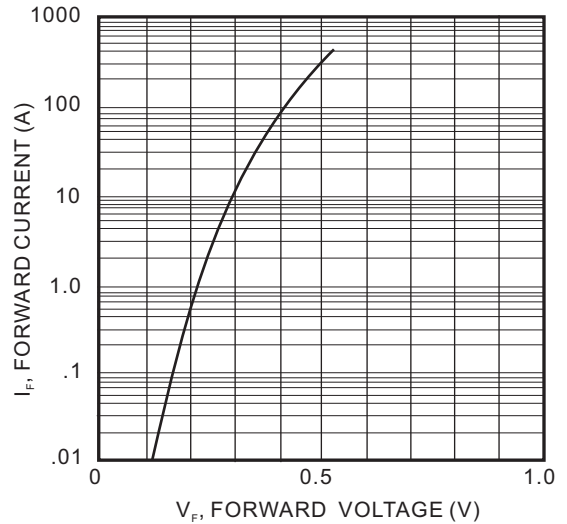
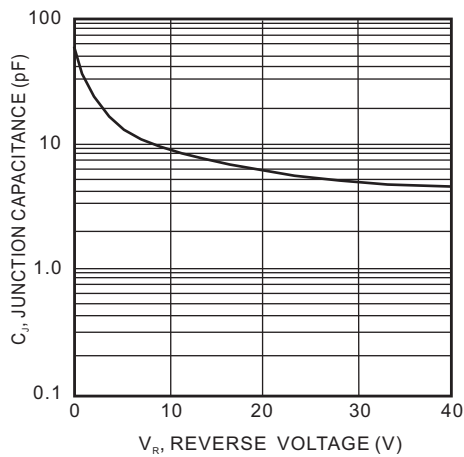


Fig. 3 TYPICAL JUNCTION CAPACITANCE VS REVERSE VOLTAGE



Marking

Type number	Marking code
CUS520,H3F-FS	S4